IN THE CLAIMS:

1. (CURRENTLY AMENDED) An optical transmission device comprising:

a WDM port as a port for transmission and reception of a wavelength-multiplexed signal; and

a wavelength multiplex/demultiplex unit, the wavelength multiplex unit including a plurality of optical filters that are provided in correspondence with a plurality of wavelengths, are daisy-chain connected, and have a loss characteristic weighted at the plurality of wavelengths in correspondence with a wavelength-dependent loss characteristic, and each of the plurality of optical filters has a function of a band-pass filter and a same insertion,

wherein an order of the daisy chain connection of the plurality of optical filters corresponds to wavelength characteristics of the WDM light, ~~thereby number of time that each of the plurality of signal lights in the WDM light pass through the plurality of optical filters differs~~

wherein weight setting for realizing a loss characteristic which compensates for the wavelength-dependent loss is made in the optical filters, and wavelength channels are assigned to the optical filters in such a manner that influences of accumulated insertion loss caused by the presence of the optical filters are suppressed.

2. (CANCELED)

3. (PREVIOUSLY PRESENTED) The optical transmission device according to claim 1, comprising when a curve of said wavelength-dependent loss characteristic has an extreme value and shows decrease in loss with increase in wavelength in a first wavelength range in which the gradient of the curve is negative and increase in loss with increase in wavelength in a second wavelength range in which the gradient of the curve is positive,

said plurality of optical filters are arranged in such a manner that signals to be demultiplexed first pass through ones of said plurality of optical filters corresponding to wavelengths in one of said first and second wavelength ranges in decreasing order of said wavelength-dependent loss characteristic, and then through other ones of said plurality of optical filters corresponding to wavelengths in another of said first and second wavelength ranges in decreasing order of said wavelength-dependent loss characteristic.

4. (CANCELED)

5. (CURRENTLY AMENDED) An optical transmission system comprising:

an optical transmission line as a transmission medium of a wavelength-multiplexed signal;

a first optical transmission device being connected to an end of said optical transmission line, and comprising a wavelength multiplex unit including a plurality of first optical filters that are provided in correspondence with a plurality of wavelengths, are daisy-chain connected, and have a loss characteristic weighted at the plurality of wavelengths in correspondence with a wavelength-dependent loss characteristic, and each of the plurality of first optical filters has a function of a band-pass filter and a same insertion loss, and

a first OSC filter through which insertion of an OSC signal for maintenance control is performed; and

a second optical transmission device being connected to another end of said optical transmission line, and comprising a wavelength demultiplex unit including a plurality of second optical filters that are provided in correspondence with a plurality of wavelengths, are daisy-chain connected, and have a loss characteristic weighted at the plurality of wavelengths in correspondence with said wavelength-dependent loss characteristic, and each of the plurality of second optical filters has a function of a band-pass filter and a same insertion loss,

wherein an order of the daisy chain connection of the plurality of optical filters corresponds to wavelength characteristics of the WDM light, ~~thereby number of time that each of the plurality of signal lights in the WDM light pass through the plurality of optical filters differs~~

wherein weight setting for realizing a loss characteristic which compensates for the wavelength-dependent loss is made in the optical filters, and wavelength channels are assigned to the optical filters, and wavelength channels are assigned to the optical filters in such a manner that influences of accumulated insertion loss caused by the presence of the optical filters are suppressed.

6. (CANCELED)

7. (PREVIOUSLY PRESENTED) The optical transmission system according to claim 5, comprising when a curve of said wavelength-dependent loss characteristic has an extreme value and shows decrease in loss with increase in wavelength in a first wavelength range in which the gradient of the curve is negative and increase in loss with increase in wavelength in a second wavelength range in which the gradient of the curve is positive,

said plurality of optical filters in each of said first and second wavelength multiplex/demultiplex units are arranged in such a manner that signals to be demultiplexed first

pass through ones of said plurality of optical filters corresponding to a plurality of wavelengths in one of said first and second wavelength ranges in decreasing order of said wavelength-dependent loss characteristic, and then through other ones of said plurality of optical filters corresponding to a plurality of wavelengths in another of said first and second wavelength ranges in decreasing order of said wavelength-dependent loss characteristic.

8. (CANCELED)

9. (PREVIOUSLY PRESENTED) The optical transmission system according to claim 5, comprising each of said wavelength multiplex/demultiplex units has a loss characteristic which compensates for half of said wavelength-dependent loss characteristic so that differences among different channels in loss caused by transmission of a wavelength-multiplexed signal are suppressed, and loss levels in the different channels in the wavelength-multiplexed signal are equalized.

10. (PREVIOUSLY PRESENTED) The optical transmission system according to claim 5, comprising said wavelength multiplex unit has a first loss characteristic which compensates for a first wavelength-dependent loss characteristic of a first section of the optical transmission line between said first optical transmission device and a midpoint of the optical transmission line, and said wavelength demultiplex unit has a second loss characteristic which compensates for a second wavelength-dependent loss characteristic of a second section of the optical transmission line between said midpoint and said second optical transmission device, so that differences among different channels in loss caused by transmission of a wavelength-multiplexed signal are suppressed, and loss levels in the different channels in the wavelength-multiplexed signal are equalized.

11. (PREVIOUSLY PRESENTED) The optical transmission system according to claim 5, comprising said wavelength multiplex unit has a loss characteristic which compensates for said wavelength-dependent loss characteristic of the optical transmission line, and said wavelength demultiplex unit has a flat loss characteristic which shows identical loss levels at all wavelengths used in transmission, so that differences among different channels in loss caused by transmission of a wavelength-multiplexed signal are suppressed, and loss levels in the different channels in the wavelength-multiplexed signal are equalized.

12. (PREVIOUSLY PRESENTED) The optical transmission system according to claim 5, comprising said wavelength multiplex unit has a flat loss characteristic which shows identical loss levels at all wavelengths used in transmission, and said wavelength demultiplex unit has a loss characteristic which compensates for said wavelength-dependent loss characteristic of the optical transmission line, so that differences among different channels in loss caused by transmission of a wavelength-multiplexed signal are suppressed, and loss levels in the different channels in the wavelength-multiplexed signal are equalized.

13.- 20. (CANCELED)

21. (CURRENTLY AMENDED) An optical apparatus inputting a WDM light, in which a plurality of signal lights are multiplexed, comprising:

a plurality of optical filters having input ports, through ports, and reflecting ports, respectively, each of the plurality of optical filters having characteristics for a light received at the input port so that one of the plurality of signal lights is configured to be output to the through port and others of the plurality of signal lights are configured to be output to the reflecting port; and

a plurality of connectors daisy-chain connecting the plurality of optical filters with reflecting ports and input ports,

wherein an order of the daisy-chain connection of the plurality of optical filters corresponds to wavelength characteristics of the WDM light,

~~wherein an order of the daisy-chain connection of the plurality of optical filters corresponds to wavelength characteristics of the WDM light, thereby number of time that each of the plurality of signal lights in the WDM light pass through the plurality of optical filters differs~~

wherein weight setting for realizing a loss characteristic which compensates for the wavelength-dependent loss is made in the optical filters, and wavelength channels are assigned to the optical filters in such a manner that influences of accumulated insertion loss caused by the presence of the optical filters are suppressed.

22. (PREVIOUSLY PRESENTED) The optical apparatus according to claim 21, wherein each of the plurality of optical filters has a same insertion loss.

23. (CURRENTLY AMENDED) An optical transmission system apparatus inputting a WDM light, in which a plurality of signal lights are multiplexed, comprising:

a first optical apparatus inputting a WDM light, in which a plurality of signal lights are

multiplexed, comprising:

a plurality of optical filters having input ports, through ports, and reflecting ports, respectively, each of the plurality of optical filters having characteristics for a light received at the input port so that one of the plurality of signal lights is configured to be output to the through port and others of the plurality of signal lights are configured to be output to the reflecting port; and

a plurality of connectors daisy-chain connecting the plurality of optical filters with reflecting ports and input ports;

an OSC filter through which insertion of an OSC signal for maintenance control is performed; and

a second optical apparatus inputting a WDM light, in which a plurality of signal lights are multiplexed, comprising:

a plurality of optical filters having input ports, through ports, and reflecting ports, respectively, each of the plurality of optical filters having characteristics for a light received at the input port so that one of the plurality of signal lights is configured to be output to the through port and others of the plurality of signal lights are configured to be output to the reflecting port; and

a plurality of connectors daisy-chain connecting the plurality of optical filters with reflecting ports and input ports,

wherein an order of the daisy-chain connection of the plurality of optical filters corresponds to wavelength characteristics of the WDM light,

~~wherein an order of the daisy-chain connection of the plurality of optical filters corresponds to wavelength characteristics of the WDM light, thereby number of time that each of the plurality of signal lights in the WDM light pass through the plurality of optical filters differs~~

wherein weight setting for realizing a loss characteristic which compensates for the wavelength-dependent loss is made in the optical filters, and wavelength channels are assigned to the optical filters in such a manner that influences of accumulated insertion loss caused by the presence of the optical filters are suppressed.

24. (CURRENTLY AMENDED) The optical apparatus according to claim ~~21~~ 23, wherein each of the plurality of optical filters has a same insertion loss.